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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,333	06/18/2001	Josef Winter	01P077	8909
466	7590	01/29/2004	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			OCAMPO, MARIANNE S	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/868,333

Applicant(s)

WINTER ET AL.

Examiner

Marianne S. Ocampo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4,6-11,26-31,33 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4,6-11,26-31,33 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Withdrawal of Last Office Action

1. This application is being reopened for prosecution after final, in order to address a feature (presented previously in claim 32) which is added now in the amended version of claim 29 inadvertently not addressed in the last final office action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4, 7 – 11, 27 – 29 and 33 - 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindberg et al. (WO 97/19737).

4. With respect to claim 4, Lindberg et al. disclose a filter element comprising:

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- a rigid generally cylindrical canister (10) having an internal diameter, an open (top) end (in the vicinity of member 14) and a thin side wall having an outer surface and an inner surface and,
- a paper roll (12) as filter media and the paper roll (12) having a marginally greater diameter than the internal diameter of the canister prior to insertion into the canister (10) and
- spaced anti-tracking ribs (spaced annular ridges) projecting from the inner surface of the side wall (10) at a distance from the inner surface, and
- the canister being *sufficiently rigid* (has been considered by the examiner to include those which are reusable/recyclable materials which inherently possess a stiffness or physical stability upon use/exposure to fluids during filtration) and the paper roll being sufficiently tightly wound that the paper roll (12) when inserted into the canister (10) using a press, is substantially compressed to the internal diameter of the canister (10) without distortion of the canister (10). See fig. 1 and pages 3 - 11.

Eventhough Lindberg et al. do not disclose the distance of 1 – 2 mm for the projection of the anti-tracking ribs from the inner surface of the side wall, it is considered obvious to one of ordinary skill in the art that the amount of distance of the projection is dependent upon the user/manufacture of the canister and could be formed to be 1 – 2 mm. The case law, *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984)], cert. Denied, 469 U.S. 830, 225 USPQ 232 (1984), the Fed. Circuit held that where the only difference between the prior art (Lindberg et al., in this instance) and the claims was a recitation of relative dimensions (i.e.

distance of 1 – 2 mm of the projection of the spaced ribs) of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device (i.e. the device of Lindberg et al. may have ribs which may have shorter or longer ribs' projection than the claimed device, or even have the same exact distance of 1 – 2 mm from the inner surface of the side wall of the canister), the claimed device was not patentably distinct from the prior art device. Furthermore, since the required projection distance of the ribs is only applicable during the making of an intermediate product (i.e. canister of the device), the final product (i.e. the claimed filter element) which is sufficiently the same or at least obvious from the prior art device of Lindberg et al., is considered unpatentable.

Although Lindberg et al. do not disclose explicitly the rigid (polymeric/plastic) canister (10) being injection moulded or that it (rigid canister) was formed by injection molding, it is considered an obvious variant of the claimed invention, and it is possible the polymeric rigid canister of Lindberg may be formed in the same manner/by injection molding by choice of the manufacturer, and eventhough, there is a difference in the method of making the prior art rigid canister (which could have been made by blow molding or casting or other methods), it is considered that the claimed invention (i.e. filter element having an injection moulded canister) and the prior art (filter element of Lindberg et al. having a rigid polymeric canister) would not perform differently from that of the claimed invention. Claim 4 is a product by process claim. The patentability of a product by process claim is based upon the product itself, eventhough the claim is limited and defined by process (i.e. the canister of the filter element being formed by

injection molding), and therefore, the product in such a claim is unpatentable if it is the same as, or obvious from the product of the prior art, even if the product of the prior art had been made by a different process. See *In re Thorpe, et al.*, No. 85-1913 (11-21-85) 227 USPQ pages 964 – 966.

5. Concerning claim 7, Lindberg et al. further disclose:

- (at least a pair of) the ribs/ridges being evenly (uniformly) spaced from (each pair of) other ribs/ridges on the inner surface of the side wall, as in fig. 1, and
- the side wall (forming the canister 10 of Lindberg et al.) having a slight taper on the inner surface thereof, as in fig. 1.

6. With regards to claim 8, Lindberg et al. also disclose:

- the canister including a marginal taper (flare 14) on the inner surface at the open end to act as lead-in for the paper roll (12), as in fig. 1 and page 10, lines 3 – 5.

7. Regarding claims 9 - 11, Lindberg et al. disclose the filter element including:

- a base (15) and the base being inwardly dished (claim 9), in order to provide a bias against loading as the paper roll (12) filter media is pressed into the canister (10), as in fig. 1 and page 10, and
- the base (end wall 15) having an inner surface with radially extending flow passages (formed between projections to allow filtrate to track/flow across the end wall into the

center core 13) separated by lands (projections on end wall 15) which define a supporting surface to evenly distribute and support the paper roll filter media (12) across the base (15) of the canister (10) to provide secondary flow passages (i.e. radially extending flow passages) across the base (15) of the canister (10), as in also fig. 1 and page 10, lines 6 - 11.

8. With regards to claim 27, Lindberg et al. disclose a filter element comprising:

- a rigid injection moulded generally cylindrical canister (10) having an internal diameter, an open end (at 14) and a thin side wall (10), the side wall having an outer surface and an inner surface
- a paper roll (12, see pages 4 – 5 & fig.1) as filter medium, wherein
- spaced anti-tracking (at least 6 are shown on the inner surface of the side wall 10) ribs (i.e. each one from another) being unevenly spaced from each other and projecting from the inner surface of the sidewall a distance and the paper roll (12) having a marginally greater diameter than the internal diameter of the canister prior to its insertion into the canister (10), and the canister being sufficiently rigid and the roll (12) being sufficiently tightly wound so that the paper roll (12) when inserted using a press into the canister is substantially compressed to the internal diameter of the canister without distortion of the canister, as in fig. 1 and abstract and pages 3 - 11.

9. Concerning claim 28, Lindberg et al. also disclose:

- adjacent ribs being spaced by a rib spacing, the rib spacing varying along the inner surface of the side wall of the canister (10), as in fig. 1.

10. Regarding claim 29, Lindberg et al. disclose a filter element comprising:

- a substantially cylindrical canister (10) having an open (top) end (in the vicinity of member 14), a base (15) having at least one axially extending annular projections (ridges, 27 at upper surface of bottom end wall 15 of the canister 10 which are clearly shown in figs. 1 and 11) defining at least one annular channel in the base (15), and a side wall having an outer surface and an inner surface defining an internal diameter of the canister (10) and,
- the inner surface having plural axially spaced anti-tracking ribs (spaced annular ridges) projecting radially inward (from the inner surface of the side wall (10) at a distance from the inner surface) and
- a paper roll (12) as filter media and the paper roll (12) having a first diameter greater diameter than the internal diameter of the canister when the paper roll is outside the canister (10) and a second diameter substantially the same as the internal diameter of the canister so that the paper roll filter media (12) contacts the inner surface between an adjacent two of the plural axially spaced ribs without distortion of the canister when the paper roll is inserted into the canister (10), wherein
- a generatrix defining the outer surface is a straight line, as in figs. 1 & 5 of Lindberg et al. (WO 737) and pages 3 - 11.

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11. With respect to claim 33, Lindberg et al. disclose the inner surface further comprising:

- an annular outward chamfer (14) at the open end of the canister (10), as in fig. 1 and page 10.

12. Concerning claim 34, Lindberg et al. also disclose:

- the outer surface having an outward facing annular rib (14) at the open end, as in fig. 1.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 6, 26 and 30 - 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindberg et al.

15. With regards to claim 6, Lindberg et al. has disclosed all the limitations of base claim 4 above, but failed to disclose the further limitation of the ribs projecting about 1.5 mm from the inner surface of the canister (claim 6). It is considered obvious to one of ordinary skill in the art to modify the height/projection of the ribs from the inner surface of the side wall, depending upon the choice of the user to achieve a desired result which is enough spacing necessary such that the paper roll media could be removed easily from the canister at the same time the spacing inhibits tracking/leaking of the filtrant between the filter element/media (12) and the wall of the canister (10). The case law, *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) has stated that the discovery of an optimum value of a result effective variable in a known process (in this case, the optimum value for the rib projection being in the range of about 1.5 mm) is ordinarily within the skill of the art, and thus a prima facie case of obviousness is established."

16. Concerning claim 26, Lindberg et al. has disclosed all the limitations of base claim 4, but failed to disclose the further limitation of the ribs being formed by corresponding grooves in a male mould member and the grooves being spaced so that as the canister is progressively slid off the male mould member the ribs do not all encounter grooves at the same time. Claim 26 is a product by process claim. The patentability of a product by process claim is based upon the product (in this instance, a filter element as claimed by claim 4) itself, even though the claim is limited and defined by process (forming the ribs using grooves in a male mould member), and therefore, the product in such a claim is unpatentable if it is the same as, or obvious from the product of the prior art, even if the product of the prior art had been made by a different process.

See *In re Thorpe, et al.*, No. 85-1913 (11-21-85) 227 USPQ pages 964 – 966. In this instance, the prior art, Lindberg et al. do not teach or disclose how the ribs/ridges on the inner surface of the sidewall of the canister are made, and even though the process is different from what is being claimed in claim 26, the filter element of Lindberg et al. is still considered an obvious variant of the claimed invention and would not perform differently from that of the claimed invention.

17. With regards to claim 30, Lindberg et al. has disclosed all the limitations of base claim 29, but failed to disclose the further limitation of the ribs numbering 8. Lindberg et al. have shown at least 6 (plural) ribs formed on the inner surface of the side wall of the canister (10). The case law, *In re Harza* [274 F.2d, 124 USPQ 378 (CCPA 1960)] has provided a prima facie case of obviousness, in the instance that a mere duplication of parts (in this instance, having 8 ribs instead of just 6 ribs) for a multiplied effect does not carry any patentable weight or significance unless a new or unexpected result is produced. See also M.P.E.P. section 2144.04 part VI paragraph B.

18. Regarding claim 31, Lindberg et al. further disclose the (plural, at least 6 are shown) ribs (each one from another) being unevenly spaced, as in fig. 1.

Response to Arguments and Amendments

19. Applicant's arguments and amendments filed on 12-18-03 with respect to claims 4, 6 - 11, 26 - 31 and 33 - 34 have been considered but are not persuasive. This application has been reopened in order to address the rejection of claim 32, which has been inadvertently not addressed in the last final office action mailed to the applicants on 8-25-03.

20. With regards to the addition of the limitation of the distance of 1 – 2 mm (from canceled claim 5) into the base claim 4, although the prior art (i.e. Lindberg et al.) does not explicitly disclose the distance of the projection of 1 – 2 mm from the inner surface of the sidewall, the ribs shown in fig. 1 are relatively very small and may be 1 – 2 mm away from the inner surface of the sidewall, and this distance could be optimized or changed accordingly as a matter of choice by the manufacturer in order to achieve the desired result, which in this case, would be provide spacers which would provide sufficient distance to allow ready removal of the filter element upon its clogging from the canister but are occupying the least amount of space in order to allow the filter element to occupy the most volume/area available within the canister for filtration.

21. Regarding the declaration under Rule 132 filed by the one of the applicants, Harold T. Krelle, the declaration has been considered but the arguments filed therein are not persuasive. Particularly, Mr. Krelle discusses a metal canister disclosed in an Australian Patent no. 650,176 which has not been used by the examiner to reject the claims, and the canister of Lindberg et al. disclosed in the applied prior art, WO 97/19737 is not a metal canister but an injection moulded

plastic canister like the claimed invention. In fact, all the limitations have been disclosed or shown by the applied prior art, WO 97/19737, in this entirety (specification and drawings) except for the distance of 1 – 2 mm for the projection of the ribs disposed on the inner surface of the sidewall of the canister. Mr. Krelle has concluded based on the disclosure of the Australian patent that the depth/projection of the ribs of Lindberg et al. are too great/greater than 1 – 2 mm, however, this assumption is not persuasive, since the figure (fig. 1) provided with the WO 97/19737 show ribs which are not large, but in fact, they are relatively small.

22. Concerning claim 32, it is true that this claim was inadvertently not addressed in the last office action, but this does not make the claim (as well as claim 29) allowable. In fact, Lindberg et al. have taught/disclosed a base which has an annular projection (ridge, 27) axially extending from the end wall/bottom end of the canister to define at least one annular channel at the base/bottom end of the canister, as in figs 1 and 11 and page 10.

23. **This action is non-final.**

Conclusion

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne S. Ocampo whose telephone number is (571) 272 -

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1144. The examiner can normally be reached on Mondays to Fridays from 8:30 A.M. to 4:30 P.M..

25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272 - 1151. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

hso
M.S.O.

Walker
W. L. WALKER
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TECHNOLOGY CENTER 1703